EBIO 403/404
Undergraduate Honors Research in Ecology and Evolutionary Biology

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Office: Anderson Biology Lab 135C **Office Hours**: By appointment **Lab:** ABL 125

Overview
Students conduct original research in ecology and evolutionary biology under the supervision of a faculty mentor culminating in a written thesis. Open only to undergraduate majors who meet specific requirements and with permission of the instructor. Registration for EBIO 403/404 implies a commitment to participate in research for at least 2 semesters.

Course Learning Goals
By the end of the course, students are expected to have:

- an in-depth understanding of at least one level of biological organization (i.e. genetic, genomic, cellular, organismal, population, community, or ecosystem); and
- an understanding of the practice and culture of science and scientific ethics.

By the end of the course, students are expected to be able to:

- locate primary scientific literature and use critical thinking and problem solving skills to develop an independent research project;
- collect, analyze, and interpret data using common statistical methods and software programs; and
- communicate effectively about original scientific research in the form of a written scientific report and an oral presentation of a scientific poster.

Location, Time, and Expectations
Schedule and work space will be arranged with the instructor. On average, students should expect to spend approximately 15 hours per week working on their research projects. Students are expected to be self-motivated and are responsible for maintaining regular communication with the instructor.

Assignments

- **Thesis**- Students complete a written report summarizing their research results. The thesis should be written in a format that is similar to that of a peer-reviewed research paper appropriate for the field in which the research is conducted. Detailed expectations and schedule for completion of the thesis will be provided by the instructor.

- **Poster-** Students present the results of their original research in the form of a scientific poster presented at the Rice Undergraduate Research Symposium (RURS) held annually in the Spring.

Grading
Final course grades are based on the completion of the assignments listed above as well as effort and participation as determined by the instructor.

Honor Code
See official Rice University Honor System policies (http://honor.rice.edu/). All exams will be pledged and must be completed in the time allotted unless arrangements are made ahead of time. Any use of outside resources (including published and unpublished research, websites, or personal communication) should be clearly cited on all assignments. Policies in Rice University's General Announcements apply to this course.

Students with Disabilities
If you have a disability that will impact your work in this class, please speak with me during the first two weeks of class. All discussions will remain confidential. Additionally, you must contact Disability Support Services (http://dss.rice.edu/) located in the Allen Center, Room 111.